

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Richard H. Harvey
Serial No.: 09/827,738
Filing Date: April 6, 2001
Group Art Unit: 2162
Examiner: Jean B. Fleurantin
Confirmation No.: 6701
Title: DIRECTORY SEARCHING METHODS AND SYSTEM

Mail Stop Notice of Appeal

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

PRE-APPEAL BRIEF REQUEST FOR REVIEW

The following Pre-Appeal Brief Request for Review is being filed in accordance with the provisions set forth in the Official Gazette Notice of July 12, 2005 ("OG Notice"). Pursuant to the OG Notice, this Request is being filed concurrently with a Notice of Appeal. Applicant respectfully requests reconsideration of the rejection of all claims in the Application.

REMARKS

In the prosecution of the present Application, the PTO's rejections and assertions contain clear errors of law. Most notable of the legal errors present in the examination of the Application is a failure of the Final Office Action (the "*Final Office Action*") to establish a *prima facie* rejection of at least independent Claims 1 and 22, which are rejected as allegedly being obvious over C.M.R. Leung, "An object-oriented approach to directory systems," 1990, pages 736-740 ("*Leung*") in view of J. Rumbaugh et al., "Object-Oriented Modeling and Design," 1991, pages 366-396 ("*Rumbaugh*").

Independent Claim 22 of the present application recites a first table and a second table. The second table is related to the first table in that the second table includes "one row for each of the plurality of data components of the given data entry of the first table." Claim 22 further recites "determining a component of a given data entry of a **first table**" and "identifying a component identifier indicating a data type that is associated with the component of the **first table**." The component identifier is used "to execute one of an exact or initial matching on a column of a **second table in order to locate the component in the second table**." Finally, Claim 22 then recites "returning the given data entry from the **first table** matching the component located." Thus, Applicants' claim recites a method of searching a database that requires the cooperation of two tables to identify a component identifier in the first table, search the second table for the identifier, and then return the given data entry from the first table that matches the component located in the second table. This combination of features and operations is not disclosed, taught, or suggested in the proposed *Leung-Rumbaugh* combination of elements recited in Applicant's Claim 22.

Throughout prosecution, the Examiner has identified *Leung* as disclosing Applicant's recited steps of "identifying a component identifier indicating a data type that is associated with the component of the **first table**," "using the component identifier [identified in the first table] . . . to execute one of an exact or initial matching on a column of a **second table in order to locate the component in the second table**," and then "returning the given data entry from the **first table** matching the component located," as recited in Applicant's Claim 22. For reasons stated in Applicant's responses filed August 14, 2007 and April 8, 2008,¹ however, it is Applicant's position that *Leung* does not disclose the particular combination of

¹ It is noted in the OG Notice at <http://www.uspto.gov/web/offices/com/sol/og/2005/week28/patbref.htm> that "Applicants are encouraged to refer to arguments already of record rather than repeating them in the request." Accordingly, Applicants refer here to, and summarize, the previous arguments rather than reciting them explicitly.

claim elements recited in Claim 22. Rather, *Leung* merely discloses a directory service that supports “[d]irectory interrogation . . . composed of five abstract services: Read, Compare, List, Search, and Abandon.” (*Leung*, page 737, column 2, paragraph 1). Specifically, the cited portions of *Leung* (page 737, column 2, paragraph 5) disclose that a user can perform directory requests and that such requests may include a search function. The mere disclosure of providing a search service, however, is not analogous to Applicant’s recited operations.

In the *Office Action*, the Examiner points to the DIT table as teaching the claimed “first table” and to the ENTRY table as teaching the claimed “second table.” (*Office Action*, pages 9-10). However, Applicant respectfully submits that *Leung* does not disclose, teach, or suggest performing operations on the DIT and ENTRY tables in a manner analogous to the steps of Applicant’s claims. With respect to the DIT and ENTRY tables, *Leung* discloses a number of operations that may be performed on each. For example, operations that may be performed on the DIT include DitNavigate, DitAdd, DitRemove, DitChildren, DitParent, DitSubtree, and DitModifyRdn. (*Leung*, page 739, column 1, paragraph 2). Operations that may be performed on the ENTRY include Read, Add, Remove, Modify, ModifyRDN, Compare, GETRdn, and Search. (*Leung*, page 739, column 1, paragraph 2). Based on *Leung*’s description of each of these operations, the operations performed on the DIT table are isolated to the DIT table, and operations performed on the ENTRY table are isolated to the ENTRY table. There is no indication in *Leung* that the operations relating to the DIT and ENTRY tables are interrelated.

For example, with respect to a “Search” operation performed on the ENTRY table, *Leung* discloses that the “Search” operation results in the return of “details of ENTRYs which satisfied the specified filter (search conditions) within the specified search domain (a list of system identifiers of objects to be searched).” (*Leung*, page 739, column 1, paragraph 2). As such, the “Search” operation to be performed on the ENTRY table as disclosed in *Leung* is not used to identify and return an entry in the DIT table. Rather, it is used to identify and return an entry in the ENTRY table. For at least these additional reasons, *Leung* cannot be said to disclose, teach, or suggest “using the component identifier indicating the data type to execute one of an exact or initial matching **on a column of a second table in order to locate the component in the second table**” and “returning the given data entry **from the first table** matching the component located,” as recited in Applicant’s Claim 22.

As another example of the deficiencies of the proposed *Leung-Rumbaugh* combination, it continues to be Applicant’s position that the cited references do not disclose,

teach, or suggest “the **second table** comprising one row for each of the plurality of data components of the given data entry of the first table,” as recited in Applicant’s Claim 22. In the *Final Office Action*, the Examiner relies on *Leung* for disclosure of the first and second tables and on *Rumbaugh* for disclosure of “creating a second table storing data components and having one row for each component of the data.” (*Final Office Action*, pages 6-8). However, the disclosures of *Leung* and *Rumbaugh*, even in combination, do not disclose, teach, or suggest *cooperation* between first and second tables that results in “the **second table** comprising one row for each of the plurality of data components of the given data entry of the **first table**,” as recited in Applicant’s Claim 22.

Leung merely discloses an object-oriented database consisting of two objects “the DIT and ENTRY, stored as two relational tables,” which are illustrated in Figure 6. (*Leung*, page 739, column 1, paragraph 1; *id.* at Figure 6). *Leung*’s DIT table “holds the information of the structure of the DIT.” (*Leung*, page 739, column 1, paragraph 1; *id.* at Figure 6). In the DIT table, each entry occupies one row and contains “the system identifier of an object, that of its parent, and its RDN.” (*Leung*, page 739, column 1, paragraph 1; *id.* at Figure 6). The ENTRY table, on the other hand, includes detailed information about each directory object. (*Leung*, page 739, column 1, paragraph 1; *id.* at Figure 6). In the ENTRY table, each row contains “the system identifier of [a directory] object, and an attribute value of an attribute type of the object in both normalized and raw forms.” (*Leung*, page 739, column 1, paragraph 1; *id.* at Figure 6). Thus, the DIT and ENTRY tables contain different information for each object. There is no disclosure in *Leung* of the ENTRY table “comprising one row for each of the plurality of data components of the given data entry” of the DIT, as is required by Applicant’s Claim 22. At most, *Leung* discloses that the first table includes one row for the data of the first table and that the second table includes one row for the data of the second table.

Rumbaugh does not cure the deficiencies of *Leung*. *Rumbaugh* merely discloses “how to translate object models into DBMS code.” (*Rumbaugh*, page 368, paragraph 2; page 374, paragraph 5). According to the process disclosed in *Rumbaugh*, “you should formulate object models for the external and conceptual schema. Then, you should translate each object model to ideal tables, that is, the table model.” (*Rumbaugh*, page 373, paragraph 2). In the *Office Action*, the Examiner points to figure 17.12 as disclosing Applicant’s claimed step. However, Figure 17.12 merely describes that an object model is translated into a table model, which is then translated into SQL code. (*Rumbaugh*, page 381, Figure 17.12; page 380,

paragraphs 1-6). Similarly, Figure 17.13 illustrates an object model (for a qualified association), and Figure 17.14 illustrates the translation of the object model of Figure 17.13 into a table model. Applicant's respectfully submit that an object model is not analogous to Applicant's "first table" since an object model is not a table at all. Since the table model of *Rumbaugh* is formed from an object model and an object model is not analogous to a table, the table model of *Rumbaugh* cannot be said to be analogous to "the second table comprising one row for each of the plurality of data components of the given data entry of the first table," as recited in Claim 22.

Accordingly, for at least these reasons and the reasons described in Applicants' Responses dated August 14, 2007 and April 8, 2008, Applicant contends that the rejection of Claim 22 is improper. For analogous reasons, Applicant contends that the rejection of independent Claim 1 is also improper.

CONCLUSION

As the rejections of Claims 1 and 22 contain clear deficiencies, Applicant respectfully requests a finding of allowance of Claims 1 and 22, together with any claims depending from Claims 1 and 22. To the extent necessary, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts, L.L.P.

Respectfully submitted,
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Date: May 21, 2008

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